sensor & calibration tips

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Dear Scott,

You are receiving this e-mail because you are a dynamic sensor professional. The goal of this monthly communication is to provide technical information and tips about the calibration and use of dynamic sensors in vibration, pressure and force. The information is provided by the PCB Group of companies, as well as industry experts from research, government and academia. Technical information will be presented in a short, easy to read format and will contain liberal links to further information should you desire a deeper dive into the technology.

Tip of the Month

Here's a remarkably simple one that saves hours of time over the course of a month....

Consider using the "sweep down" function of your calibration system when calibrating your general purpose accelerometers. This starts the frequency sweep at the upper frequency limit, which coincidentally is the most common frequency where an accelerometer can fail. If there is a problem (such as loose transducer mount, missing silicone grease, etc) the first measurement point will immediately fail, the calibration operator can abort the measurement and then remount the sensor. In older calibration systems, this saves 10-15 minutes of sweep time per failed sensor and in newer systems it still can save a minute or so.

Quick Links

Governance & accreditation Build your own cal lab NCSL metrology symposium International metrology conf Int'l measurement confed

Video Cool mode shape visualization Accelerometers for kids

Function and Structure of Accelerometers...



Often accelerometers are treated as a "black box" with little regard to the internal construction. The wide spread integration of built-in ICP® sensor power into most modern day dynamic data acquisition systems often places two wire, constant

current signal conditioning in this "black box" domain as well. As a result, many users have requested more information on the structure and performance of dynamic sensors.

How's your knowledge on dynamic sensors?

Click here to increase it...

Standards and Calibration...

...ISO 9001, 17025, 16063

Already operating under an ISO9001 Quality management system?

The world of standards, controlled processes, documentation and audits can



sometimes be daunting... To help demystify this world when it comes to accelerometer calibration, we'll begin by discussing the relationships between the various parts of each these quality system pieces.

Click here to read more about quality standards and calibration...

As always, your satisfaction is at the pinnacle of our work. If you have questions that you would like answered, please contact us and we'll be glad to help out. Your question may even be featured in a future month... Join Our Mailing List!

Sincerely,

Michael J Fally

Michael J. Lally The Modal Shop A PCB Group Company

